

### 3. RECOMMENDATIONS

Based on this accident and others which have occurred under similar circumstances, the Safety Board recommends to the Administrator of the Federal Aviation Administration, that through his Air Carrier Inspectors, all operators of the Convair 880 and similar type aircraft be asked to take the following actions: (1) re-emphasize to the pilot personnel the characteristics of these aircraft during critical-engine-out maneuvers; (2) assure that flight instructors, trainees, and line pilots are well aware of safe and proper critical-engine-out procedures, the limits of sideslip angles, rudder availability, and yaw limits for vertical stabilizer stall; and (3) caution all instructor personnel to emphasize that they must be most careful to avoid any tendency to delay corrective actions too long during critical training maneuvers even though the purpose of the training flight is to check the actions of trainees who must have an opportunity to respond properly.

In connection with recommendation number 2, the Safety Board considers the paper written by Captain A. P. Wilson, Convair Engineering, Production flight, an excellent example of information, the essence of which should be included in training manuals and curriculums by all operators of large swept-wing four-engine turbojet aircraft of the Convair 880 type.

In addition to the foregoing, as the result of the several above-referenced accidents involving engine-out maneuvers, the Safety Board made other recommendations to the Administrator. These recommendations and the Administrator's response thereto are included as Attachment 1 of this report. At the present time, deliberations on the recommendations are continuing.

BY THE NATIONAL TRANSPORTATION SAFETY BOARD:

/s/ JOHN H. REED  
Chairman

/s/ OSCAR M. LAUREL  
Member

/s/ FRANCIS H. McADAMS  
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/s/ LOUIS M. THAYER  
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/s/ ISABEL A. BURGESS  
Member

June 17, 1970